Jon H. Bechtel et al.

Appln. No.

10/068,540

Page

15

REMARKS

Applicants wish to thank the Examiner for the courtesy extended to their personal representatives during the personal interview conducted on November 13, 2003. During the interview, the claims as amended in this Amendment were presented as a proposed amendment. The Examiner acknowledged that such proposed amendments overcome the rejections that were made in the last Office Action. The substance of the interview is discussed further below in the context of the rejections to which such substance pertains.

In the Office Action, the Examiner indicated that claims 17-26 and 43 are allowed and that claims 37-42 would be allowed if rewritten in independent form. Applicants wish to thank the Examiner for this early indication of allowable subject matter. By this Amendment, Applicants have amended claims 37, 40 and 41 by rewriting these claims in independent form. Accordingly, these claims are now in condition for allowance along with claims 38, 39 and 42 which depend therefrom. Accordingly, claims 37-42 in addition to claims 17-26 and 43 are now in condition for allowance.

By this Amendment, Applicants have amended claims 1, 6, 8, 9, 13, 17, 27-29, 34, 37, 40, 41, 43 and 44 in order to more clearly define the present invention. In addition, new claims 45-49 have been added. No new matter has been added by this Amendment. Claims 1-49 are now pending.

With respect to the rejection of claims 1-16 and 28-36 under 35 U.S.C. §112, second paragraph, Applicants submit that the claims as originally presented are sufficiently definite to meet the requirements of 35 U.S.C. §112, second paragraph. Nevertheless, Applicants have clarified the language in claims 1, 8, 9, 13, 28, 29 and 34. During the interview, the Examiner

Jon H. Bechtel et al.

Appln. No.

10/068,540

Page

16

indicated that the rejection of the claims under 35 U.S.C. §112, second paragraph, had been overcome.

Applicants respectfully travers the rejection of claims 1-5, 11, 27 and 44 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,114,688 issued to Tanaka et al. During the interview, Applicants pointed out that Tanaka et al. fails to teach or suggest a sensor device comprising "a support structure; a sensing element mounted on said support structure for sensing optical radiation and generating an electrical output signal in response thereto; and an encapsulant encapsulating said sensing element on said support structure, said encapsulant being configured to define a lens portion for focusing incident optical radiation onto an active surface of said sensing element, and an optical radiation collector portion surrounding the lens portion for collecting and reflecting optical radiation that is not incident on the lens portion onto the active surface of said sensing element," as recited in independent claim 1. The Examiner agreed that claim 1 is patentable over Tanaka et al.

With respect to independent claim 27, it was pointed out during the interview that

Tanaka et al. failed to teach or suggest a vehicle accessory for mounting in a vehicle, where
the vehicle accessory comprises a sensor device comprising: "a support structure; a sensing
element mounted on said support structure for sensing optical radiation and generating an
electrical output in response thereto; and an encapsulant encapsulating said sensing element on
said support structure, said encapsulant being configured to define a lens portion for focusing
incident optical radiation onto an active surface of said sensing element, and an optical
radiation collector portion surrounding the lens portion for collecting and reflecting optical
radiation that is not incident on the lens portion onto the active surface of said sensing

Jon H. Bechtel et al.

Appln. No.

10/068,540

Page

17

element," as recited in independent claim 27. During the interview, the Examiner agreed with this assertion.

With respect to independent claim 44, Applicants pointed out during the interview that Tanaka et al. fails to teach or suggest a sensor device comprising: "a support structure; a sensing element mounted on said support structure for sensing optical radiation and generating an electrical output in response thereto; and an encapsulant encapsulating said sensing element on said support structure, said encapsulant including an integral lens for directing incident optical radiation toward said sensing element; and a light collector surrounding the integral lens for collecting and reflecting optical radiation that is not incident on the lens onto the active surface of said sensing element," as recited in independent claim 44. During the interview, the Examiner agreed with this assertion.

Claims 2-5 and 11, which depend from independent claim 1, are allowable for the same reasons discussed above with respect to independent claim 1. Accordingly, Applicants respectfully submit that claims 1-5, 11, 27 and 44 are allowable over Tanaka et al.

To ensure compliance with the requirements that a detailed summary of the interview is provided in this response, Applicants point out that a prototype rearview mirror assembly was shown to the Examiner, which did not include a mirror element, but rather included a mirror housing, bezel and a circuit board. The circuit board of this prototype included two sensors that are similar to that shown in Fig. 1 of this application. The first of these sensors was mounted to the rear of the circuit board while the second of such sensors was mounted to the front of the circuit board. Secondary optical elements were provided in apertures of the rearview mirror housing and bezel within the field of view of the sensors.

Jon H. Bechtel et al.

Appln. No.

10/068,540

Page

18

As noted above, the Examiner generally agreed with the Applicants that the claim rejections set forth in the Office Action were no longer applicable to the proposed claims. In this regard, Applicants also proposed amendments to allowed independent claims 17 and 43 to broaden the scope of these claims. New claims 45-48 are dependent claims that depend from claims 17 and 43 and which recite the features that were taken out of claims 17 and 43. During the interview, the Examiner agreed that the removal of these features from claims 17 and 43 would not give rise to any rejection over the prior art of record.

Applicants respectfully traverse the rejection of claims 6, 9 and 12-16 under 35 U.S.C. §103(a) as being unpatentable over Tanaka et al. These claims all depend from independent claim 1, and thus are allowable for at least the reasons stated above with respect to independent claim 1.

New independent claim 49 defines a vehicle accessory comprising a housing having an aperture; a secondary optical element positioned across said aperture; and a sensor device. The sensor devices comprises: a support structure; a sensing element mounted on said support structure for sensing optical radiation and generating an electrical signal in response thereto; and an encapsulant encapsulating said sensing element on said support structure, said encapsulant being configured to define an optical radiation collector portion for collecting and redirecting incident optical radiation towards said sensing element. Applicants submit that claim 49 is allowable over the prior art of record.

Jon H. Bechtel et al.

Appln. No.

10/068,540

Page

19

In view of the foregoing amendments and remarks, Applicants submit that the present invention is in condition for allowance. A Notice of Allowance is therefore respectfully solicited.

Respectfully submitted by,

Jon H. Bechtel et al.

Price, Heneveld, Cooper, DeWitt & Litton, LLP

December 2, 2003

Date

Terry S Callaghan

Registration No. 34,559 695 Kenmoor, S.E.

Post Office Box 2567

Grand Rapids, Michigan 49501

(616) 949-9610

TSC/amm